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(54) Title: **NOVEL STREPTOCOCCUS THERMOPHILUS STRAINS PRODUCING STABLE HIGH-MOLECULAR-MASS EXOPOLYSACCHARIDES**

(57) Abstract: The invention relates to the field of exopolysaccharide producing lactic acid bacteria. The invention relates to methods and culture media for producing large amounts of exopolysaccharides in safe and simple fermentation conditions. The invention more specific relates to the characterization of a *Streptococcus thermophilus* ST 111 strain producing a stable high-molecular-mass heteropolysaccharide, its use in functional starter cultures and its use in food fermentation processes such as processes producing milk products, yoghurt and cheese for texture improvement and decreasing syneresis during fermentation and in the fermented product.